



EPA Office of Prevention, Pesticides, and Toxic Substances

**How To Comply with the Worker Protection Standard
for Agricultural Pesticides: What Employers Need to Know
Appendix B: Sample Forms, Fact Sheets, and Checklists**

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<http://www.epa.gov/agriculture/htc.html>

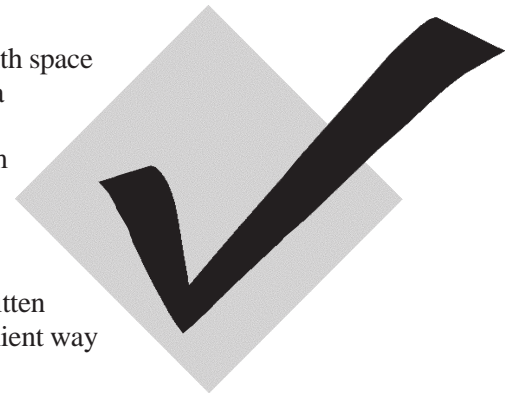
APPENDIX B

SAMPLE FORMS, FACT SHEETS, AND CHECKLISTS

Appendix B includes a sample Pesticide Application Information form with space for the pesticide application information the WPS requires to be listed at a central location on each agricultural establishment. The WPS does not specify a format for presenting the information — you may copy this form or design another that meets your needs.

Appendix B also includes several fact sheets to help you comply with sections of the WPS that require you to provide information to others. Although the WPS does not require you to provide this information in written form, you may find that using photocopies of these fact sheets is a convenient way to make sure you convey the necessary information.

Finally, Appendix B includes some checklists and charts you can use as reminders of your WPS duties.



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PESTICIDE APPLICATION INFORMATION

AGRICULTURAL ESTABLISHMENT OWNERS AND OPERATORS:

The use of this form is optional, but if the information about an application is entered, it will help you comply with the federal Worker Protection Standard including all revisions through 2004 for information that must be displayed at a central place to inform workers and handlers about specific pesticide applications. For complete information, see p. 19 of the EPA manual “The Worker Protection Standard for Agricultural Pesticides: How To Comply.”

	Application #1	Application #2
Area Treated: Location & Description		
Product Name		
EPA Registration Number		
Active Ingredient: Common or Chemical Name		
Application: Month/Day/Time		
Restricted-Entry Interval		
Do Not Enter Until: Month/Day/Time		

Similar data is required by the Federal Recordkeeping Requirements for Certified Applicators of Federally Restricted Use Pesticides (RUP). For more information on the RUP recordkeeping requirements, contact Agricultural Marketing Service, USDA, 8609 Sudley Road, Suite 203, Manassas, VA 20110, (703) 330-7826. Please consult the “USDA Recordkeeping Manual” at the following Web site for a complete list of all USDA record keeping requirements: <http://www.ams.usda.gov/science/prb/Prbforms.htm>

Some states, tribes, or local governments with jurisdiction over pesticide enforcement may have additional worker protection requirements beyond these requirements. Check with these agencies to obtain the information you need to comply with all applicable state, tribal, or local requirements.

Note to Employers:

This 2-page fact sheet will help you comply with the section of the WPS that requires you to provide information to people (other than your own handlers) who clean PPE for you. You are not required to give them this information in written form, but you may find that photocopying this fact sheet is an easy way to pass along the necessary information.

INFORMATION ABOUT CLEANING PPE

PROTECT YOURSELF FROM PESTICIDES

- ☐ 1. The clothing and protective equipment items you will be cleaning may have pesticides on them.
- ☐ 2. Although you may not be able to see or smell the pesticides, they can rub off on you when you touch the clothing and equipment.
- ☐ 3. If pesticides get on you, they can hurt you. They can:
 - cause skin rashes or burns,
 - go through your skin and into your body and make you ill,
 - burn your eyes,
 - make you ill if you breathe them or get them in your mouth.
- ☐ 4. To avoid harm from the pesticide, you should:
 - Pour the clothes from their container into the washer without touching them.
 - Handle only the inner surfaces, such as the inside of boots, aprons, or coveralls.
 - Do not breathe the steam from the washer and dryer.
- ☐ 5. Pesticides should not be allowed to stay on your hands:
 - When you wash clothing or equipment by hand, use plenty of water and rinse your hands often.
 - Wash your hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
 - Wash your hands as soon as you finish handling the clothing or equipment.
- ☐ 6. You should not allow clothing and equipment with pesticides on them to be washed with regular laundry. The pesticides can rub off on other items.

RECOMMENDED METHODS FOR CLEANING PPE

Cleaning Eyewear and Respirators

Hand-wash reusable respirator facepieces, goggles, face shields, and shielded safety glasses, following manufacturer's instructions. In general, use mild detergent and warm water to wash the items thoroughly. Rinse well. Wipe dry, or hang in a clean area to air dry.

Cleaning Other PPE

- ☐ 1. Follow the manufacturer's cleaning instructions. If the instructions say only to wash the item, or if there are no cleaning instructions, follow the procedure below.
- ☐ 2. Recommended procedure for washing most PPE:
 - a. **Rinse** in a washing machine or by hand.
 - b. **Wash in a washing machine**, using a heavy-duty detergent and hot water for the wash cycle.
 - c. **Wash only a few items at a time** to allow plenty of agitation and water for dilution. Use the highest water-level setting.
 - d. **Rinse twice** using two rinse cycles and warm water.
 - e. **Use two entire machine cycles** to wash items that are moderately to heavily contaminated.
 - f. **Run the washer through at least one more entire cycle** without clothing, using detergent and hot water, to clean the machine.
- ☐ 3. Some plastic or rubber items that are not flat, such as gloves, footwear, and coveralls, must be washed twice — once to clean the outside and a second time after turning the item inside out.
- ☐ 4. Some items, such as heavy-duty boots and rigid hats or helmets, should be washed by hand using hot water and heavy-duty detergent.
- ☐ 5. **Hang the items to dry**, if possible. Let them hang for at least 24 hours in an area with plenty of fresh air — preferably outdoors. Do not hang items in enclosed living areas.
- ☐ 6. You may **use a clothes dryer** for fabric items if it is not possible to hang them to dry. But after repeated use, the dryer may become contaminated with pesticides.

Note to Employers:

This fact sheet will help you comply with the section of the WPS that requires you to provide information to people (other than your own handlers) who clean or maintain your pesticide equipment. You are not required to give them this information in written form, but you may find that photocopying this fact sheet is an easy way to pass along the necessary information.

WORKING SAFELY WITH PESTICIDE EQUIPMENT

- ☐ 1. The equipment you will be cleaning, adjusting, or repairing may have pesticides on it. Although you may not be able to see or smell the pesticides, they can rub off on you when you touch the equipment.
- ☐ 2. If pesticides get on you, they can hurt you. They can:
 - cause skin rashes or burns,
 - go through your skin and into your body and make you ill,
 - burn your eyes,
 - make you ill if you get them in your mouth.
- ☐ 3. You should wear work clothing that protects your body from pesticide residues, such as long-sleeved shirts, long pants, shoes, and socks. If possible, avoid touching the parts of the equipment where the pesticide is most likely to be. Or, if practical for the job that you will be doing, consider wearing rubber or plastic gloves and an apron.
- ☐ 4. You should not let pesticides stay on your hands:
 - Wash your hands as soon as you finish handling the equipment.
 - Wash your hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
 - Wash or shower with soap and water, shampoo your hair, and put on clean clothes after work.
 - Wash work clothes that may have pesticides on them separately from other clothes before wearing them again.

AGRICULTURAL ESTABLISHMENT OWNERS & OPERATORS

Agricultural Establishment Owners and Operators:

The use of this form is optional, but if you hire custom applicators or independent crop advisors, you must provide this information to the employers of those persons. This information is necessary to assure that custom applicators and independent crop advisors are protected according to the federal Worker Protection Standard including all revisions through 2004. For complete information, see p. 26 of the EPA manual “The Worker Protection Standard for Agricultural Pesticides: How To Comply.”

INFORMATION TO BE PROVIDED TO EMPLOYERS OF CUSTOM APPLICATORS AND INDEPENDENT CROP ADVISORS

The following information refers to areas that your employees may need to enter, or come within 1/4 mile of on foot, while working on this agricultural establishment.

	Application #1	Application #2
Areas to be Treated or Under Restricted Entry Intervals: Location & Description		
Entry Restricted Until: Month/Day/Time		
PPE Required for Handlers*		
Early-Entry PPE Required for Workers*		

**The only early entry allowed is that which is permitted by the federal Worker Protection Standard including all revisions through 2004.*

CUSTOM APPLICATORS

Custom (for hire) Applicators:

The use of this form is optional, but you must provide this information to the agricultural owners and operators who hire you to apply pesticides. This information is necessary to assure that the grower's employees are protected according to the federal Worker Protection Standard including all revisions through 2004. For complete information, see p. 26 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."

INFORMATION TO BE PROVIDED TO AGRICULTURAL ESTABLISHMENT OWNERS AND OPERATORS

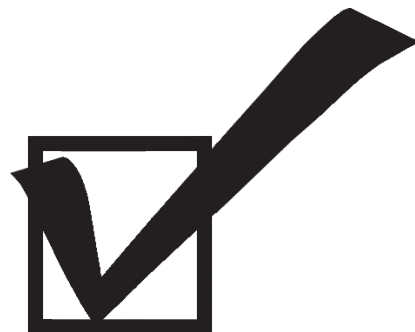
	Application #1	Application #2
Area to be Treated: Location & Description		
Product Name		
EPA Registration Number		
Active Ingredient: Common or Chemical Name		
Application: Month/Day/Time*		
Entry Restricted Until: Month/Day/Time		
Are Both Treated Area Posting and Oral Notifications Required?		
Other Label Requirements to Protect Workers, Handlers, and Others		
PPE Required for Handlers**		
Early-Entry PPE Required for Workers**		
Other		

**If the pesticide is not applied as scheduled, the customer must be notified of the corrected time and date before the application takes place. If you are unable to make the correction before the application takes place, make it as soon as possible thereafter.*

***The only early entry allowed is that permitted by the federal Worker Protection Standard including all revisions through 2004.*

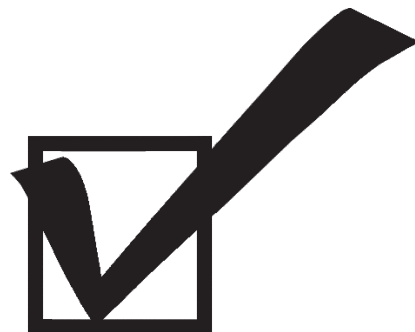
CHECKLIST: WPS REQUIREMENTS FOR AGRICULTURAL WORKERS

Have you given your agricultural workers the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your worker employees. For complete explanations, refer to “The Worker Protection Standard for Agricultural Pesticides — How To Comply.”



- ☐ 1. Information at a central location (WPS safety poster, application information, location of emergency medical facility)H-T-C pp. 19-20
- ☐ 2. Pesticide safety training for workersH-T-C pp. 21-23
- ☐ 3. Decontamination supplies (water, soap, towels, etc.)H-T-C pp. 24-25
- ☐ 4. Emergency assistance (transportation and information)H-T-C p. 27
- ☐ 5. Restrictions during applications (do not allow workers in area).....H-T-C pp. 36-37
- ☐ 6. Special application restrictions in nurseriesH-T-C pp. 41-42
- ☐ 7. Special application restrictions in greenhousesH-T-C pp. 43-44
- ☐ 8. Restrictions during restricted-entry intervals (and limitations on early entry).....H-T-C pp. 36-37 and 47-56
- ☐ 9. Notice about applications (oral warnings and treated area posting)H-T-C pp. 33-35

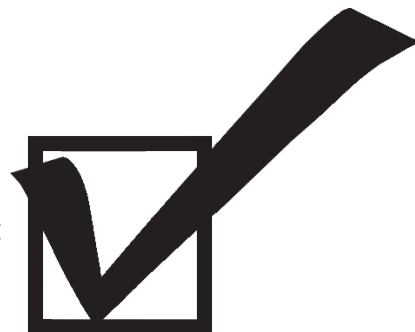
CHECKLIST: WPS REQUIREMENTS FOR PESTICIDE HANDLERS



Have you given your pesticide handlers the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your handler employees. For complete explanations, refer to “The Worker Protection Standard for Agricultural Pesticides — How To Comply.”

- ☐ 1. Information at a central location (WPS safety poster, application information, location of emergency medical facility) H-T-C pp. 19-20
- ☐ 2. Pesticide safety training for handlers H-T-C pp. 21-23
- ☐ 3. Decontamination supplies (water, soap, towels, change of clothing, etc.) H-T-C pp. 24-25
- ☐ 4. Emergency assistance (transportation and information) H-T-C p. 27
- ☐ 5. Restrictions during applications (do not allow pesticide to contact anyone directly or through drift) H-T-C p. 59
- ☐ 6. Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) H-T-C p. 59
- ☐ 7. Specific instructions for handlers (pesticide label information and how to use application equipment) H-T-C p. 60
- ☐ 8. Equipment safety (inspection and maintenance of application equipment) H-T-C p. 61
- ☐ 9. Personal protective equipment (provide, clean, maintain PPE, and prevent heat illness) H-T-C pp. 62-63
- ☐ 10. Exceptions to personal protective equipment (closed systems, enclosed cabs, and open and enclosed cockpits) H-T-C pp. 66-67

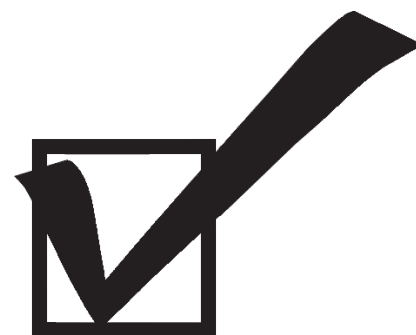
CHECKLIST: WPS REQUIREMENTS FOR COMMERCIAL HANDLERS



Have you given the handler employees of your commercial pesticide handling establishment the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your handler employees. For complete explanations, refer to “The Worker Protection Standard for Agricultural Pesticides — How To Comply.”

- ☐ 1. Pesticide safety training for handlers H-T-C pp. 21-23
- ☐ 2. Decontamination supplies (water, soap, towels, change of clothing, etc) H-T-C pp. 24-25
- ☐ 3. Emergency assistance (transportation and information) H-T-C pp. 27
- ☐ 4. Restrictions during applications (do not allow pesticide to contact anyone directly or through drift) H-T-C p. 59
- ☐ 5. Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) H-T-C p. 59
- ☐ 6. Specific instructions for handlers (pesticide label information and how to use application equipment) H-T-C p. 60
- ☐ 7. Equipment safety (inspection and maintenance of application equipment) H-T-C p. 61
- ☐ 8. Personal protective equipment (provide, clean, maintain PPE, and prevent heat illness) H-T-C pp. 62-63
- ☐ 9. Exceptions to personal protective equipment (closed systems, enclosed cabs, and open and enclosed cockpits) H-T-C pp. 66-67

CHECKLIST: WPS EXEMPTIONS FOR AGRICULTURAL OWNERS



Although agricultural owners are encouraged to give WPS protections to themselves and their families,* the WPS does not **require** them to provide themselves or members of their immediate family with the following:

- ☐ 1. Information at a central location (WPS safety poster, application information, and location of emergency medical facility) H-T-C pp. 19-20
- ☐ 2. Pesticide safety training for workers or handlers H-T-C pp. 21-23
- ☐ 3. Decontamination supplies (water, soap, towels, change of clothing, etc.) H-T-C pp. 24-25
- ☐ 4. Emergency assistance (transportation and information) H-T-C p. 27
- ☐ 5. Notice about applications (oral warnings and treated area posting) . H-T-C p. 33-35
- ☐ 6. Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) H-T-C p. 59
- ☐ 7. Specific handling instructions (pesticide label information and how to use application equipment) H-T-C p. 60
- ☐ 8. Equipment safety (inspection and maintenance of application equipment) H-T-C p. 61
- ☐ 9. All the specific duties related to the care of PPE and management of its use (provide, clean, maintain PPE and prevent heat illness) .. H-T-C pp. 62-63
- ☐ 10. The following duties related to early entry: H-T-C pp. 53-56
 - Training and instructions
 - Decontamination supplies
 - Specific duties related to the care of PPE and management of its use.

* *Remember that you must provide all protections required by the WPS to persons who are **not** members of your immediate family.*

CHECKLIST: WPS REQUIREMENT TO PROVIDE BASIC PESTICIDE SAFETY INFORMATION TO UNTRAINED WORKERS



You must provide basic pesticide safety information to **untrained** workers before they enter treated areas on your establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect. For a complete explanation, refer to “The Worker Protection Standard for Agricultural Pesticides — How To Comply.”

The following is a list of things that you must provide:

- ☐ 1. Basic pesticide safety information in a manner that the untrained workers can understand, such as through written materials, oral communication, or other means.
- ☐ 2. Verification that you provided the workers with the required basic pesticide safety information.
- ☐ 3. At least the following information:
 - Pesticides may be on or in plants, soil, irrigation water, or drifting from nearby applications.
 - To prevent pesticides from entering your body:
 - Follow directions and/or signs about keeping out of treated or restricted areas,
 - Wash before eating, drinking, using chewing gum or tobacco, or using the toilet,
 - Wear work clothing that protects your body from pesticide residues,
 - Wash/shower with soap and water, shampoo hair, and put on clean clothes after work,
 - Wash work clothes separately from other clothes before wearing them again,
 - Wash immediately in the nearest clean water if pesticides are spilled or sprayed on your body and then — as soon as possible — shower, shampoo, and change into clean clothes.
 - You will receive more training within 5 days (or at least before your sixth day of work in pesticide-treated areas on this establishment).

EPA CHEMICAL RESISTANCE CATEGORY CHART

This chart is to be used when PPE section on the pesticide label lists a chemical resistance category. The Worker Protection Standard requires that labels of pesticides used on farms, and in forests, nurseries and greenhouses list the type of personal protective equipment (PPE) that must be worn with each product. Labels will refer to chemical resistance categories (A-H) for PPE. Items in these categories are made of materials that the pesticide cannot pass through during the times indicated below the chart. Choose the category of resistance which best matches the handling task duration. The categories are based on the solvents used in the pesticides, **not** the pesticides themselves. Therefore, there will be instances where the same pesticide with two different formulations (wetable powder-WP and emulsifiable concentrate-EC, for example) will require PPE from two different chemical resistance categories.

Selection Category Listed on Pesticide Label	Types of Personal Protective Material							
	Barrier Laminate	Butyl Rubber ≥ 14 mils	Nitrile Rubber ≥ mils	Neoprene Rubber ≥ 14 mils	Natural Rubber ≥14 mils	Poly-ethylene	Polyvinyl Chloride (PVC) ≥14 mils	Viton ≥14 mils
A (a dry and water-based formulation)	high	high	high	high	high	high	high	high
B	high	high	slight	slight	none	slight	slight	slight
C	high	high	high	high	moderate	moderate	high	high
D	high	high	moderate	moderate	none	none	none	slight
E	high	slight	high	high	slight	none	moderate	high
F	high	high	high	moderate	slight	none	slight	high
G	high	slight	slight	slight	none	none	none	high
H	high	slight	slight	slight	none	none	none	high

HIGH: Highly chemical-resistant. Clean or replace PPE at end of each day's work period. Rinse off pesticides at rest breaks.

MODERATE: Moderately chemical-resistant. Clean or replace PPE within an hour or two of contact.

SLIGHT: Slightly chemical-resistant. Clean or replace PPE within ten minutes of contact.

NONE: No chemical-resistance. Do not wear this type of material as PPE when contact is possible.

HEAT STRESS: PREVENTABLE MEASURES, ILLNESSES, AND FIRST AID TREATMENTS

WAYS TO CONTROL HEAT STRESS IN AGRICULTURAL ENVIRONMENTS

Taken from EPA's "Controlling Heat Stress in Agriculture" (EPA 750-F-95-001)

Key Elements

- Drinking enough water to replace body fluid lost through sweating.
- Gradually adjusting to working in the heat.
- Taking periodic breaks in a shaded or air conditioned area whenever possible.
- Monitoring by supervisors of environmental conditions and workers.

Basic Steps

- Training in how to control heat stress and to recognize, prevent, and treat heat illnesses.
- Accounting for the weather, workload, protective gear to be worn, and condition of the workers.
- Determining minimum amounts of water workers should drink.
- Adjusting work practices for the conditions of each day.
- Giving first aid when workers become ill.

HEAT ILLNESSES AND FIRST AID MEASURES

Chart taken from EPA's "A Guide to Heat Stress in Agriculture" (EPA 750-B-92-001)

Illness	Signs and Symptoms	Cause and Problem	Treatment
Early heat illness	<ul style="list-style-type: none"> ■ Mild dizziness, fatigue, or irritability; decreased concentration; impaired judgement 	<ul style="list-style-type: none"> ■ Reduced flow of blood to the brain ■ May lead to heat exhaustion or heat stroke 	<ul style="list-style-type: none"> ■ Loosen or remove clothing ■ Rest in shade 30 minutes or more ■ Drink water
Heat rash "prickly heat"	<ul style="list-style-type: none"> ■ Tiny, blister-like red spots on the skin; pricking sensations ■ Commonly found on clothed areas of the body 	<ul style="list-style-type: none"> ■ Sweat glands become plugged and inflamed from unrelieved exposure of skin to heat, humidity, and sweat 	<ul style="list-style-type: none"> ■ Clean skin, apply mild drying lotion or cornstarch ■ Wear loose clothing ■ Preventable by regular bathing and drying the skin and by periodic relief from humid conditions of work ■ See physician if rash persists
Heat cramps	<ul style="list-style-type: none"> ■ Painful spasms of leg, arm, or abdominal muscles ■ Heavy sweating, thirst ■ Occurs during or after hard work 	<ul style="list-style-type: none"> ■ Loss of body salt in sweat ■ May be totally disabling 	<ul style="list-style-type: none"> ■ Loosen clothing ■ Drink <i>lightly</i> salted beverages ■ Massage ■ Rest

HEAT ILLNESS AND FIRST AID MEASURES (cont.)

Illness	Signs and Symptoms	Cause and Problem	Treatment
Heat exhaustion	<ul style="list-style-type: none"> ■ Fatigue, headache, dizziness, muscle weakness, loss of coordination, fainting, collapse ■ Profuse sweating; pale, moist, cool skin; excessive thirst, dry mouth; dark yellow urine ■ Fast pulse, if conscious ■ Low or normal oral temperature, rectal temperature usually 99.5–101.3 degrees F ■ May also have heat cramps, nausea, urge to defecate, rapid breathing, chills, tingling of the hands or feet, confusion, giddiness, slurred speech, irritability 	<ul style="list-style-type: none"> ■ Dehydration, lack of acclimatization; reduction of blood in circulation; strain on circulatory system, reduced flow of blood to the brain ■ Worker may resist treatment ■ May lead to heat stroke 	<ul style="list-style-type: none"> ■ Removal to cooler, shaded area as quickly as possible ■ Rest lying down ■ If conscious, have worker drink as much water as possible ■ Do not give salt ■ If unconscious or if heat stroke is also suspected, treat for heat stroke until proven otherwise ■ Loosen or remove clothing ■ Splash cold water on body ■ Massage legs and arms ■ If worker collapsed, get evaluation by physician, nurse, or EMT before worker leaves for the day; shower in cold water; rest for balance of day and overnight
Heat stroke Immediate Treatment Required	<p><i>Life-threatening medical emergency</i></p> <ul style="list-style-type: none"> ■ Often occurs suddenly ■ Headache, dizziness, confusion, irrational behavior, coma ■ Sweating may slow down or stop ■ Fast pulse, if conscious ■ Rapid breathing ■ Rectal temperature 104 degrees F and over ■ May also have convulsions, nausea, incoherent speech, very aggressive behavior 	<ul style="list-style-type: none"> ■ Sustained exertion in heat, lack of acclimatization, dehydration, individual risk factors; reduced flow of blood to the brain and other vital organs, body's temperature-regulating system fails, body can not cool itself ■ Risk of damage to vital organs, including the heart, brain, central nervous system, liver, and kidney ■ Worker may resist treatment ■ <i>Brain damage and death can result even with prompt treatment</i> 	<ul style="list-style-type: none"> ■ Move to a shaded area ■ Remove outer clothing/shoes ■ Immediately wrap in wet sheet, pour water on and fan vigorously, avoid over-cooling ■ Treat shock if present, once temperature is lowered ■ If worker vomits, make sure all vomit is cleared from mouth and nose to prevent choking on vomit ■ Transport to nearest medical treatment facility at once ■ While awaiting or during transport, elevate legs, continue pouring on water and fanning ■ If conscious, have worker drink as much water as possible ■ Do not give salt